July-August 2010

National Weather Service, Juneau, Alaska

COOP Corner

Special points of interest:

- Spotters
- "Bearly" a Forecast
- Quotes about Rain
- Who is the Observer of the Month?
- Meet Carrie

Inside this issue:

Keeping An Eye On The Weather

The Weather Service has many different tools for collecting current weather data, such as automated stations, contract observers, buoys, cameras, and trained weather spotters.

The trained weather spotter becomes our eyes and ears. Spotters can report anything they observe, both good and bad.

They are always looking out for important weather events, such as thunder/lightning, snow, hail, strong winds and flooding.

Our office receives the information from the spotters, by way of computer entries, phone calls, and even via our Weather Service Offices on their HF and VHF radios from vessels at sea. One other creative way we receive information is from pictures sent in an email. These are usually pictures of interesting "after the fact" events; sometimes there are even pictures of just plain old good weather.

Who can be a spotter? Anyone who is aware of their local environment and can communicate their observation to us. We currently have 122 trained spotters spread across the panhandle, 36 of those are also our dedicated COOP observers.

SPOTTERS WANTED

Joel Curtis is the Warning Coordination Meteorologist at WFO Juneau and he is always happy to add people to the spotter family. Do you know of someone that is in a good location, someone interested in weather? Pass on this information to them and help our office get a better look at our forecast area.

Check out the following site for more information about the spotter program. If you've never sent in a report electronically, go ahead and give it a try.

http://pajk.arh.noaa.gov/spotter.php

Stormy day on Shelter Island. This picture shows us sky, visibility, and seas. Picture by: Ken Skaggs

The Weather Report: Forecasting With Bear Fat

By: Cory Van Pelt

In this edition of "The Weather Report", I continue my investigation into old and novel ways of forecasting the weather. The methods are presented in an unbiased format for the general interest of our readers, and their appearance does not constitute an official endorsement by the National Weather Service.

In the 1930's in New Mexico, a man named G. Gordon Wimsatt learned of an old Native American weather forecasting method from an Apache hunter and trapper named George Hightower. The method consisted of rendering the fat from a bear and pouring it into a scraped deer bladder (which was mostly transparent), and interpreting the changes in the color and shape of the fat particles to foretell the weather.

Wimsatt was fascinated by this, and spent the next 60 years near Cloudcroft, New Mexico maintaining hundreds of jars of "bear grease" and using his own interpretations to forecast the weather, even coming up with a series of charts that could be used by anyone to interpret the behavior of the fat in the jars. Through experimentation, Wimsatt found that other animal fats also worked, such as turkey, chicken, turtle, cougar, seal, fowl, and sheep. Fats from cows and pigs did not work.

At first, he kept his hobby to himself, but news of his methods spread and gained local attention. In one instance, a foreman for a logging company had come into Wimsatt's general store and, according to Wimsatt, "We had a long dry spell of weather. A logging company was moving logs from the woods to the saw mill in Alamogordo. The sky was as blue as it could be, without a cloud in sight. I said, 'Archie (the foreman), you better have your trucks out of the woods by about ten o'clock, or they'll be stuck in the mud so deep you might not get them out', 'I bet your bear grease told you that', Archie said, laughing as he and a couple of his workers went on their way. Before 10 p.m., a downpour of more than 2" soaked the woods, and the logging trucks could not get out that day. Afterwards, for as long as his trucks came by my store, the foreman checked the weather with me every day."

Having already become a local celebrity, known to some as "The Bear Grease Kid", Mr. Wimsatt had his first shot at national attention on November 4, 1984, when *Ripley's Believe It or Not* ran a story about him on their television show and in newspapers nationwide. His fame spread even further almost a year later, when, on September 14, 1985, he made a public prediction based on his oil readings that a strong earthquake would occur south of his location. Five days later, on September 19th, a 7.8 magnitude earthquake struck Mexico City and caused catastrophic damage. The media grabbed on to the story of Wimsatt's prediction and he even appeared on *Good Morning America.*

Wimsatt spent many years speaking to schools and groups about his forecasting methods, and was always involved in his community. As he aged, Mr. Wimsatt began losing his sight, but he stuck with his beloved hobby and had his wife describe what she was seeing in the jars and he'd interpret them, which he did for his remaining years. He died on October 18, 1995 at the age of 80.

Below: Gordon Wimsatt holding a jar of bear grease (gordonwimsatt.com)

G. Gordon Wimsatt

Continued: Forecasting With Bear Fat

So, is it really possible to forecast the weather just by looking at jars of animal fat? I really don't know. The good thing about this investigation is that it's simple enough for you to try yourself (as I will be doing). Mr. Wimsatt believed that his methods should be available to anyone with an interest, and his daughter, Sheila (Wimsatt) Carpenter and husband Ron, have done just that.

I've included some of that information below so that you can do your own experiments:

To make a bear (or other animal) oil barometer, take pieces of clean fat (bear, chicken, turkey, fowl, or try another animal—remember, cow and pig are not recommended) and heat them slowly in a pan until all the fat is melted. Immediately strain the fat into a small clean jar and seal it. Place the jar in a south or west-facing window. Make notes of any changes in the jar and how they correlate with the weather and keep a log for future reference. Mr. Wimsatt notes that some jars may take awhile to begin showing signs, and suggests that if the temperatures get too cold and the fat solidifies, put the jar in some warm water until the fat melts. He also suggests having several jars available to read from, and try not to move or shake the jars. Also, the direction in which a weather or seismic event will occur is noted by which side of the jar the formation occurs on. I've provided a copy of Wimsatt's forecasting chart, on page 4, that he updated in 1984 that you can use for your own tests.

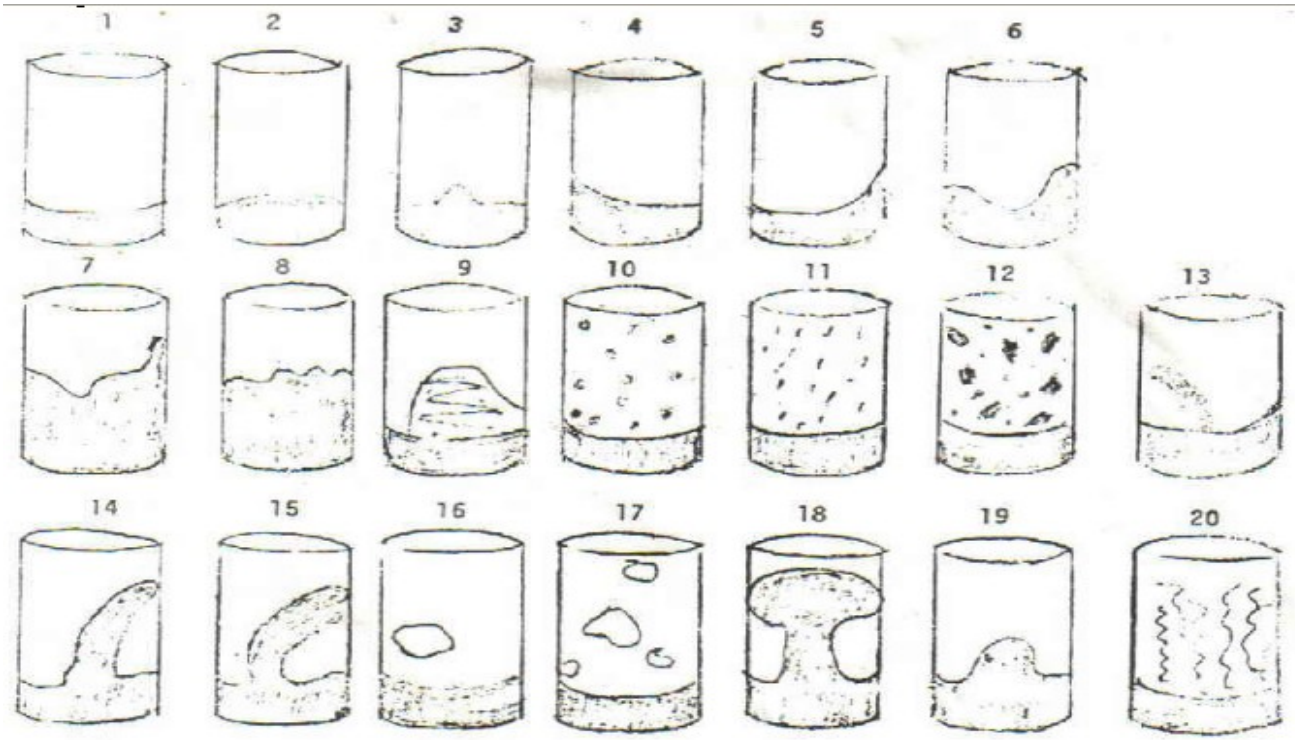
If you decide to create your own barometer, please share your results with us! I'll be making my own and will report on them in future newsletters. If you have Internet access, please send pictures of your barometer(s) to cory.vanpelt@noaa.gov and I will include them in a future report.

Special thanks to Ron and Sheila Carpenter for access to their website and for permission to use their photos. To learn more about Gordon Wimsatt and see more of his forecasting charts, visit their site at www.gordonwimsatt.com.

Bear grease forming an "earthquake pattern" according to Wimsatt's interpretations (www.gordonwimsatt.com)

Continued: Forecasting With Bear Fat

Wimsatt's Bear Grease Interpretation Chart



1. Heavy in bottom - no change for several hours - clear
2. Slight build up - some cloud cover coming
3. Build up and peak - clouds and moisture close at hand
4. & 5. Moisture close at hand from direction of point
6. Moisture close from east followed very soon by one from west
7. Double front coming in. Could turn and nothing happen
8. Padded pattern showing future storm
9. Volcanic pattern
10. Light local winds
11. Local winds at once, heavy winds
12. Local winds at once, light winds, also wind for next week
13. Start build up of hurricane
14. Tornado pattern showing direction of travel
15. Tornado pattern showing direction of travel and split
16. Start of earthquake pattern
17. Earthquake pattern
18. Inversion happens only after atomic blast
19. cone - happens just before an volcanic eruption
20. several tornadoes to hit in a very short time

NOTE: Several patterns may appear at the same time.

6-15-84
By Gordon Wimsatt
The Bear Greased Kid

Reigning in the Fall

Let the rain kiss you. Let the rain beat upon your head with silver liquid drops. Let the rain sing you a lullaby.
~Langston Hughes

The best thing one can do when it's raining is to let it rain.
~Henry Wadsworth Longfellow

Anyone who says sunshine brings happiness has never danced in the rain.
~Author Unknown

To be interested in the changing seasons is a happier state of mind than to be hopelessly in love with spring.
~George Santayana

Sunshine is delicious, rain is refreshing, wind braces us up, snow is exhilarating; there is really no such thing as bad weather, only different kinds of good weather.
~John Ruskin

As the days get shorter, the temperatures cooler and the clouds thicker. . . may these quotes about rain inspire and humor you.

There is little chance that meteorologists can solve the mysteries of weather until they gain an understanding of the mutual attraction of rain and weekends.
~Arnot Sheppard

Wherever you go, no matter what the weather, always bring your own sunshine.
~Anthony J. D'Angelo, The College Blue

I am sure it is a great mistake always to know enough to go in when it rains. One may keep snug and dry by such knowledge, but one misses a world of loveliness.
~Adeline Knapp

Some people walk in the rain, others just get wet.
~Roger Miller

Quotes gathered from www.quotegarden.com

Congrat's Craig—May Observer of the Month

Craig is this cute town on the western side of Prince of Wales, which I'm sure most of you know...but you might not know that we have an awesome observer there.

The Craig COOP site is located in an area with a wonderful view of the water, giving her great exposure to the weather around her.

Craig is one of our oldest COOP sites, established in June 1930. Although there has been a few different observers during this stations existence, Kim has been eager to accept the challenges that have come. She was one of our first COOP station to switch to WxCoder and helped with ensure the transition for others would be as smooth as possible.

9 years and counting

A second congrat's is in order for Kim as the 16th of August marked 9 years of service. Great job Kim!

Kim with Frank Stewart during our summer visit.

Superb Observing by Sitka WWTP—June Observer of the month

Bob at Sitka WWTP

Sitka Wastewater Treatment Plant has been a great addition to the COOP family.

They collect rain and snowfall, along with snow depth. Bob is the primary observer, but he is able to record the data everyday with the help of the rest of the crew.

Great Team Work

This station is only one of three that are collecting snow data on Baranof Island, and is the only one reporting snow in Sitka.

The other reporting stations are located in Little Port Walter and Port Alexander.

The next step will be getting the station to report their data using WxCoder, giving us a "near real time" report.

Photos from the Field

Ok, I know that more than just Ken out on Shelter Island can take a pictures!!

Here is Ken with an eagle he recued after it hit a tree and broke its wing. It was sent to Sitka and is expected to be released back into the wild.. Weather or feathers, Ken is always watching!

Start clicking, don't be shy...we all want to see what is happening around your neck of the woods. From interesting weather to interesting family, we want to see it.

Click, send, share!!

Observer Spotlight: Hurricanes and Horses By: Nikki Becker

Carrie ventured to Juneau last fall to become a Meteorologist Intern at the Juneau Weather Forecast Office. Her enthusiasm brightens the office daily, which you have probably noticed from talking to her on the phone.

Juneau is not her first stop in Alaska, she actually started out with the National Weather Service as a student summer intern at the Fairbanks office in 2006, and she knew that summer she would be coming back to Alaska. Back east, at North Carolina State University in Raleigh, she finished her senior year and received her Bachelor of Science degree in Meteorology and Marine Science.

Carrie's interest in weather started in her childhood with Hurricane Fran in 1996. Fran was a category 3 hurricane that made landfall near Cape Fear, North Carolina in early September. Hurricane Fran affected 4 states and caused over 5 billion dollars in damage.[1] Carrie vividly recalls wind speeds to 115 mph and damaging affects of Fran on people's lives. This severe weather event led to her fascination with Meteorology.

When Carrie is not deciphering the atmosphere, she enjoys riding horses, hiking, skiing, swimming, painting, and reading a good book. She had her first riding lesson at age 5 and has been working with horses ever since. In high school and college, she competed in jumper horse shows with other riders from around the United States. Jumping for show is a judge of the rider and horse's ability to attempt the obstacle, clear it, and finish the course in the allotted time.[2] To keep riding and share her passion for horses, Carrie actively mentors Juneau youths in the local 4H Club.

Carrie competing with her horse, Cappie, during a jumper horse show during her college years.

The rest of Carrie's spare time is spent planning her wedding for this December. She is engaged to Paul, another forecaster at Juneau Weather Forecast Office.

[1] Source: "North Carolina Hit by Frantastic Storm," NCDC, 2009. http://lwf.ncdc.noaa.gov/oa/reports/fran/fran.html#TOP

[2] Source: "About Hunters," USEF, 2010. http://www.usef.org/_IFrames/breedsDisciplines/discipline/allhunter/about.aspx

8500 Mendenhall Loop Road
Juneau, Alaska 99801

COOP Team: 907-790-6818
Office: 907-790-6824
Fax: 907-790-6827

Contributing writers:
Nikki Becker (HMT)
Cory Van Pelt (HMT)
Kimberly Vaughan (OPL)

If you have any questions, comments, or concerns about this or any other COOP matter, please feel free to contact us.

In Juneau: 907-790-6824 or 907-790-6818
Outside of Juneau: 1-877-807-8943

Kimberly Vaughan: kimberly.vaughan@noaa.gov
Cory Van Pelt: cory.vanpelt@noaa.gov
Nikki Becker: nichole.becker@noaa.gov